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THESIS

**AN HISTORICAL ANALYSIS AND COMPARISON OF
THE MILITARY RETIREMENT SYSTEM AND THE
FEDERAL EMPLOYEE RETIREMENT SYSTEM**

by

Bruce R. Bréth

June 1998

Principal Advisor:
Associate Advisor:

Richard B. Doyle
Frank J. Barrett

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The most significant change to private sector as well as civil service employee retirement systems over the past 15 years has been the transition from defined benefit to defined contribution retirement plans. This trend has shifted a significant portion of the risk involved in funding retirement from corporations and the federal government to employees. This thesis examines the military retirement system and the Civil Service Retirement System/Federal Employee Retirement System, from their introduction to present day, addressing the reasons for major changes during their evolution. Government studies, private studies, periodicals and Internet resources were consulted to identify significant developments and legislation affecting the military retirement system and Federal Employee Retirement System (FERS). While the retirement system for federal employees has transitioned from a strict defined benefit system to a system with a defined contribution element, the military retirement system has not yet incorporated a defined contribution component. The trend of persistent legislative attention towards the military retirement system implies that the 1980 and 1986 reductions didn't cut deep enough and future reductions are possible. The success of FERS suggests that the application of a defined contribution element to the current military retirement system is very likely in the future.

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EMPLOYEE RETIREMENT SYSTEM**

Bruce R. Breth
Lieutenant Commander, United States Navy
B.S., University of Minnesota, 1986

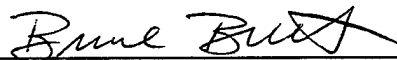
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Author:



Bruce R. Breth

Approved by:


Richard B. Doyle, Principal Advisor

Frank J. Barrett, Associate Advisor



Reuben T. Harris, Chairman
Department of Systems Management

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I. INTRODUCTION

A. FRAMEWORK

Over the past two decades, there has been an evolution in the basic premise and administration of corporate and private pension plans in the United States as well as in state and federal government pension plans. The majority of pension plans have gradually shifted from defined benefit plans to defined contribution plans. With the creation of Social Security in the wake of the Great Depression, continuing with the spread of company pension and health plans after World War II and climaxing with the passage of Medicare and Medicaid in 1965, Americans constructed a public and private social welfare system to provide themselves with greater economic security. Now, however, that system of social welfare is up for grabs. Pools are breaking apart, and the guarantees are disappearing. In their place are new programs that require individuals to take on more of the responsibility and risk of providing for their own financial security. (Ref. 1, p. 2532) The onus of retirement security is shifting from the corporation and state/federal government to the individual.

B. OBJECTIVES

The objective of the thesis is to examine the Civil Service Retirement System/Federal Employee Retirement System (CSRS/FERS) and the military retirement system from their introductions to the present day, detailing the impetus for major changes during their evolution. It will evaluate the extent to which each system has

responded to the general trend of shifting from defined benefit plans to defined contribution plans. It will also examine, in detail, the objectives of each system and attempt to evaluate how well those objectives have been or are being met. Additionally, it will discuss costs associated with each system and examine the possibility of applying certain Federal Employee Retirement System reforms to the current military retirement system.

C. RESEARCH QUESTIONS

The research questions to be addressed are:

- * What are the fundamental purposes of each system?
- * How is each system funded? What costs are associated with each system and how are those costs allocated between employers and employees?
- * What were the major changes to both retirement systems since their inceptions?
- * What factors influenced these changes?
- * What is the current status of both systems?
- * Are the defined contribution plan elements of the Federal Employee Retirement System practical for the military retirement system?
- * What are current trends with respect to retirement compensation and what is their relevance for these two systems?

D. SCOPE AND LIMITATIONS

The thesis will begin with a broad analysis of the purpose and objectives of the military retirement system and the Federal Employee Retirement System. The funding mechanisms and costs associated with each system will be examined. A comprehensive chronological history of each system will be presented and factors that brought about major changes will be addressed. The current status of both systems, to include pending legislation and the up-to-date issues being addressed in Congress will be reviewed.

Due to the sheer scope of military and federal employee retirement compensation policies, some issues will not be addressed in this study. This study concentrates on retirement policies and will not examine other military and federal employee pay structures such as base pay. The emphasis of this thesis will be on major changes to both retirement systems, an examination of the reaction of both systems to the self reliance trend and an analysis of the causes and effects of these changes.

E. METHODOLOGY

The research methodology will draw on previous government and private studies of military and federal employee retirement compensation. Information will also be gathered from existing government documents, congressional records, previous theses and Internet resources.

F. ORGANIZATION OF STUDY

The thesis is divided into six chapters presented as follows:

Chapter I: INTRODUCTION

Chapter II: BACKGROUND OF THE MILITARY RETIREMENT SYSTEM

Chapter II will examine the purposes and underlying objectives of the military retirement system, as well as the associated funding and costs. As one of our major manpower management tools, the military retirement system ensures that a smooth promotion flow continues, operates to keep a young force with the skill and experience mix we need, and forms an integral part of the military compensation system. In sum, the military retirement system exists to help meet the national defense requirement with a ready force during both peace and combat. (Ref. 2, p. 2)

Chapter III: BACKGROUND OF THE FEDERAL EMPLOYEE RETIREMENT SYSTEM

Chapter III will examine the purposes and underlying objectives of the Federal Employee Retirement System, as well as the associated funding and costs. The Federal Employee Retirement System is modeled after the more traditional pension plans of corporate and private sector entities. It is a three-tiered retirement plan comprised of Social Security benefits, a Basic Benefit Plan and a Thrift Savings Plan. The basic purpose of the Federal Employee Retirement System is to attract quality employees and

provide a secure retirement for those employees while balancing the inherent responsibility to the nation's taxpayers.

Chapter IV: HISTORY OF THE MILITARY RETIREMENT SYSTEM

The military retirement system came into existence in the mid-1800's. Since then it has undergone many changes and in recent years, much scrutiny due to increasing budgetary pressures.

An in-depth chronological analysis of changes to the military retirement system from its origin in the mid-1800's to the present day will be conducted. This analysis will focus on major legislative changes to the military retirement system and their origins and implications.

Chapter V: HISTORY OF THE CIVIL SERVICE AND FEDERAL EMPLOYEE RETIREMENT SYSTEMS

The Civil Service Retirement System (CSRS) was established in 1920 and predates the Social Security system by 15 years. When the Social Security system was established, Congress decided that employees in CSRS would not be covered by Social Security through their federal employment. CSRS is a stand-alone pension program that provides an annuity, determined by a formula, as well as disability and survivor benefits. (Ref. 3, p. 6)

The Federal Employee Retirement System (FERS) was implemented in 1987 and

generally covers those employees who first entered federal service after 1983 as well as those who transferred from CSRS to FERS. The primary impetus for the new program was the Social Security Amendments of 1983, which required that all federal employees hired after December 1983 be covered by Social Security. FERS is a three-tiered retirement program that includes Social Security and Thrift Savings Plan benefits in addition to a pension. Like CSRS, FERS provides disability and survivor benefits. (Ref. 3, p. 6)

Chapter V will provide a chronological history of the CSRS and the FERS and will examine the background and importance of major legislative changes to both systems.

Chapter VI: STATUS OF CURRENT SYSTEMS

Chapter VI will address the status of the current military and civil service retirement systems. Pending legislation and current issues being debated in Congress will be examined. Additionally, the possibility of applying the defined contribution plan elements of the Federal Employee Retirement System to the current military retirement system will be considered.

Chapter VII: SUMMARY AND CONCLUSIONS

This chapter will summarize the thesis, present major conclusions, and suggestions for further research.

II. BACKGROUND OF THE MILITARY RETIREMENT SYSTEM

A. PURPOSE OF MILITARY RETIREMENT

Meaningful discussion about the military retirement system cannot begin without a thorough understanding of the system's purpose. Both government and private studies of military retirement attempt to define the purpose of the system before engaging in their analytical work. While each study attempts to offer a unique insight to the purpose of the military retirement system, the guiding principles are consistent. One such report, *Valuation of the Military Retirement System*, produced annually by the Department of Defense, Office of the Actuary within the Office of the Secretary of Defense, offers the following interpretation:

The principle motivations guiding the evolution of the military retirement system have been to ensure that (1) continued service in the armed forces is competitive with the alternatives, (2) promotion opportunities are kept open for young and able members, (3) some measure of economic security is made available to members after retirement from a military career, (4) a pool of experienced personnel is available for recall in times of war or national emergency, and (5) the costs of the system are reasonable. (Ref. 4, p. B-2)

Another statement regarding the purposes that underlie the military retirement system is provided in the Military Compensation Background Papers. Specifically:

1. The provision of a socially acceptable level of payments to former members of the armed forces during their old age.
2. The provision of a retirement system that will enable the armed forces to remain generally competitive with private-sector employers and the Federal Civil Service.
3. The provision of a pool of experienced military manpower that can be called upon in time of war or national emergency to augment the active duty forces of the United States.
4. The provision of a socially acceptable means of keeping the military forces of the United States young and vigorous, thereby insuring promotion opportunities for younger members. (Ref. 5, p. 505)

These two independent studies clearly indicate that the military retirement system is not only meant to be a retirement plan that is competitive with the private sector, but also as a major tool for managing the manpower of the armed forces, provided at a reasonable cost to the taxpayers.

1. Competitive With Alternatives

In order for our nation's military to be able to attract motivated and competent individuals, it must be competitive with private sector alternatives and provide some measure of economic security. It should be noted that while there may be a superficial resemblance between the military retirement system and retirement systems that exist in the private sector, there are in fact substantial differences between the military retirement system and all other retirement systems, including that of federal civil servants. First, retired members of the armed forces are subject to recall to active duty; private sector employees and civil servants suffer under no such liabilities. Second, and in that same connection, regular retired members of the armed forces are subject to the Uniform Code of Military Justice, thus providing sanctions for the enforcement of the recall authority. Third, entitlement to military retirement benefits is an all-or-nothing proposition. Unlike private sector and Civil Service retirement systems, the military retirement system does not provide for the gradual vesting of retirement benefits. (Ref. 5, pp. 505-506) On the other hand, military retirees are immediately entitled to retired pay upon the completion of a minimum of 20 years of satisfactory service, while most private sector and Civil Service employees cannot begin collecting retired pay until they are at least 62 years old.

These differences between the military retirement system and other public and private sector retirement systems result from differences in the purposes of the systems. Bearing this in mind, the military retirement system, in order to be competitive with private sector alternatives, must provide a retirement system that can compensate for perceived disadvantages.

2. Manpower Management

The military retirement system plays a key role in manpower management by ensuring that promotion opportunities are kept open for young and able members and a ready pool of experienced personnel is available for recall in times of war or national emergency.

The retirement system is widely viewed as a substantial influence on the broad shape of the force. With its combination of 20 year vesting and the payment of an immediate annuity at any age after 20 years of service, the system is designed to foster a relatively young force and ensure a flow of experienced personnel through encouraging those with 20 or more years of service to retire. The system generally serves as a very strong retention tool, pulling personnel after a certain career point to stay at least 20 years. It has thus been valuable as a force stabilizer. (Ref. 6, pp. 4-5)

Another purpose of the military retirement system is to have a ready pool of experienced personnel available for recall in times of war or national emergency. In accordance with United States Code, Title 10, Section 688(a), members on the retired rolls of Regular and Reserve components of the armed forces who have completed at least 20 years of active service are explicitly subject to recall to active duty at any time in order to augment active duty forces. (Ref. 5, p. 530) In this light, retired pay is often referred to as "retainer pay." The Supreme Court has characterized military retired pay as "reduced pay for reduced levels of military service." (Ref. 2, p. 85) While the probability of an extensive recall of retired military members is unlikely, the option is available.

3. Reasonable Cost To Taxpayers

In addition to providing compensation considered competitive with private sector alternatives and serving a significant function for manpower management, the military retirement system must operate at a cost that is considered reasonable by taxpayers to maintain a balanced, effective force. Pressures to reduce the federal budget deficit have focused attention on the level of payments to current military retirees. These payments, which totaled \$29 billion in fiscal year 1996, have been rising for several decades as the retiree population has grown and as average payments to individual retirees have increased. (Ref. 6, p. 4) These costs are considerable and often come under intense scrutiny from legislators as well as citizens in the private sector. For this reason, it is important that the system operates as effectively and efficiently as possible.

B. CURRENT MILITARY RETIREMENT SYSTEM

The current military retirement system is a defined benefit plan. Individuals vest after 20 years and receive an annuity from the date of retirement. The amount is a percentage of their base pay at separation indexed for inflation. The National Defense Authorization Act for FY93 created an exception to the 20 year retirement by granting temporary early retirement authority (TERA) for the military services to offer early retirements to members with 15 or more but less than 20 years of service. This authority is scheduled to expire at the end of FY99. (Ref. 7, p. 4)

The retirement system has been modified twice in recent years (1980 and 1986), both changes reducing the value of the overall retirement. These changes were grandfathered, applying only to those coming into the service after the change. (Ref. 8, p. 52) Due to these changes in 1980 and 1986, there are currently three different retirement system benefit formulas in effect for members of the armed forces.

1. Final Basic Pay

The Final Basic Pay formula applies to those military members entering service before September 08, 1980. Retirement pay is calculated by multiplying final basic pay, at retirement, by 2.5 percent for each year of active duty service, not to exceed 75 percent of final basic pay. This formula equates to the traditionally understood benefit of 50 percent of basic pay at 20 years of service and 75 percent of basic pay at 30 years of service. This payment is received from the date of retirement until the member's death. To protect the purchasing power of initial retired pay, benefits are adjusted each year by the percentage increase in the average Consumer Price Index (CPI). This is commonly referred to as CPI protection. (Ref. 7, p. 1)

2. High-Three Year Average

The High-Three Year Average formula, commonly referred to as "High-3," applies to those military members entering service from September 08, 1980 through July 31, 1986. The High-3 formula is very similar to the Final Basic Pay formula. The High-3 formula uses the average monthly basic pay for the highest 36 months of basic pay as its

basis. The High-3 average is then multiplied by 2.5 percent for each year of active duty service, not to exceed 75 percent of the High-3 average to determine the monthly lifetime benefit. Benefits are adjusted each year by the percentage increase in the average CPI. Those retirees who fall under the umbrella of the High-3 formula will receive reduced retirement benefits compared to those covered under the Final Basic Pay formula.

3. Military Retirement Reform Act of 1986

The Military Retirement Reform Act of 1986, commonly referred to as "REDUX," applies to those military members entering service after July 31, 1986. REDUX is very similar to High-3. The same basis is used (average monthly basic pay for the highest 36 months of basic pay) for High-3 and REDUX, except the benefit is reduced by one percentage point for each year of service less than 30 for REDUX retirees. As an example, the multiplier for a service member retiring with 20 years of service would be $(2.5\% \times 20 \text{ years})$ minus $(1\% \times 10 \text{ years})$ equaling 40 percent of the High-3/REDUX basis (average monthly basic pay for the highest 36 months of basic pay) described above. A service member retiring with 30 years of service would receive 75 percent $(2.5\% \times 30 \text{ years})$ of the same basis.

Benefits for those members under REDUX will not be fully protected against inflation as are those members covered under Final Basic Pay and High-3. Retirement pay will be adjusted annually by one percentage point less than the increase in the CPI. In an attempt to make up for some of the reduction of benefits relative to the Final Basic Pay and High-3 formulas, at age 62, retired pay for REDUX retirees is restored to the amount

that would have been payable had the one percent reduction for each year of service less than 30 not been in effect. Additionally, the lost benefits resulting from the CPI minus 1 percentage point adjustments for those years from retirement to age 62 are restored to the level they would have been with full CPI indexing, resulting in a one time catch-up for REDUX retirees. However, after this one time adjustment, annual adjustments revert to the CPI minus one percent rule. In simpler terms, at age 62, a REDUX retiree will receive the same benefit as a High-3 retiree until the next CPI adjustment is made.

The three different retirement systems currently in effect for members of the armed forces are summarized in Table 2.1 below. Examples of varying retirement benefits for a retired O-5 with 22 years of service and a retired E-7 with 22 years of service are also included for comparison.

Table 2.1

Summary of Military Retirement Systems

	Final Basic Pay	High-3	REDUX
Applies to	Persons in service before September 8, 1980	Persons joining service from September 8, 1980, through July 31, 1986	Persons joining service after July 31, 1986
Computation Basis	Final rate of monthly basic pay	Average monthly basic pay for highest 36 months of basic pay	Average monthly basic pay for highest 36 months of basic pay
Multiplier	2.5 percent per year of service	2.5 percent per year of service	2.5 percent per year of service less 1.0 percentage point for each year of service less than 30 (restored at age 62)
Cost-of-Living Adjustment (COLA)	Full CPI protection	Full CPI protection	CPI minus 1 percent (one time catch-up at age 62)
Monthly retired pay for O-5 with 22 years of service	\$2899	\$2774	\$2370
Monthly retired pay for E-7 with 22 years of service	\$1405	\$1310	\$1120

Source: Adapted from Military Compensation Background Papers, Department of Defense, Office of the Secretary of Defense, 1996

C. MILITARY RETIREMENT SYSTEM FUNDING

Prior to 1984, the military retirement system was funded on a "pay-as-you-go" basis. Every year as part of the budgetary processes of the Federal government, estimates were made of the aggregate retired pay entitlements of personnel on, or expected to be on, the retired lists of the various military departments that year. Congress, through the appropriations process, appropriated moneys to pay for, or fund those entitlements. (Ref. 5, p. 799) This system worked well as far as paying retirees went, but it did not hold policymakers fiscally responsible for the implications of immediate policy decisions affecting the size of the force.

To promote better management, effective October 1, 1984, Congress enacted the Department of Defense Authorization Act, 1984, Public Law 98-94, 97 Statute 614. This legislation established the "Department of Defense Military Retirement Fund." The purpose underlying the establishment of the Fund was straightforward:

...The Department of Defense Military Retirement Fund shall be used for the accumulation of funds in order to finance on an actuarially sound basis liabilities of the Department of Defense under military retirement and survivor benefit programs. (Ref. 5, p. 799)

With the establishment of the Military Retirement Fund, Congress directed a switch to an accrual method of funding retirement. Under this method, the services transfer into the fund each year, the amount necessary to pay for future retirees' benefits. The amount transferred is a percentage of the service's basic pay. Thus, if a branch of service implements policies that affect the future value of retirement benefits, it sees the

budgetary consequences of that decision immediately in the form of an increase in the amount transferred to the retirement fund. (Ref. 9, p. 1)

When the fund was created, the Department of Defense Retirement Board of Actuaries determined that there was an unfunded liability of \$529 billion. In other words, a fully funded plan (assuming future interest and inflation rates, pay raises, and certain other assumptions) would have had assets equal to \$529 billion to pay current and future retirees for the service they had rendered *before* the creation of the fund. (Ref. 10, p. 3)

The Department of the Treasury was assigned this original unfunded liability and was given 60 years to amortize the payments. The Board of Actuaries annually calculates the liability for the pre-1984 service, adjusted for changes in assumptions and experience, and the Treasury transfers an amount equal to one year's amortized payment. The money is invested in nonnegotiable government securities and draws interest. (Ref. 9, p. 1)

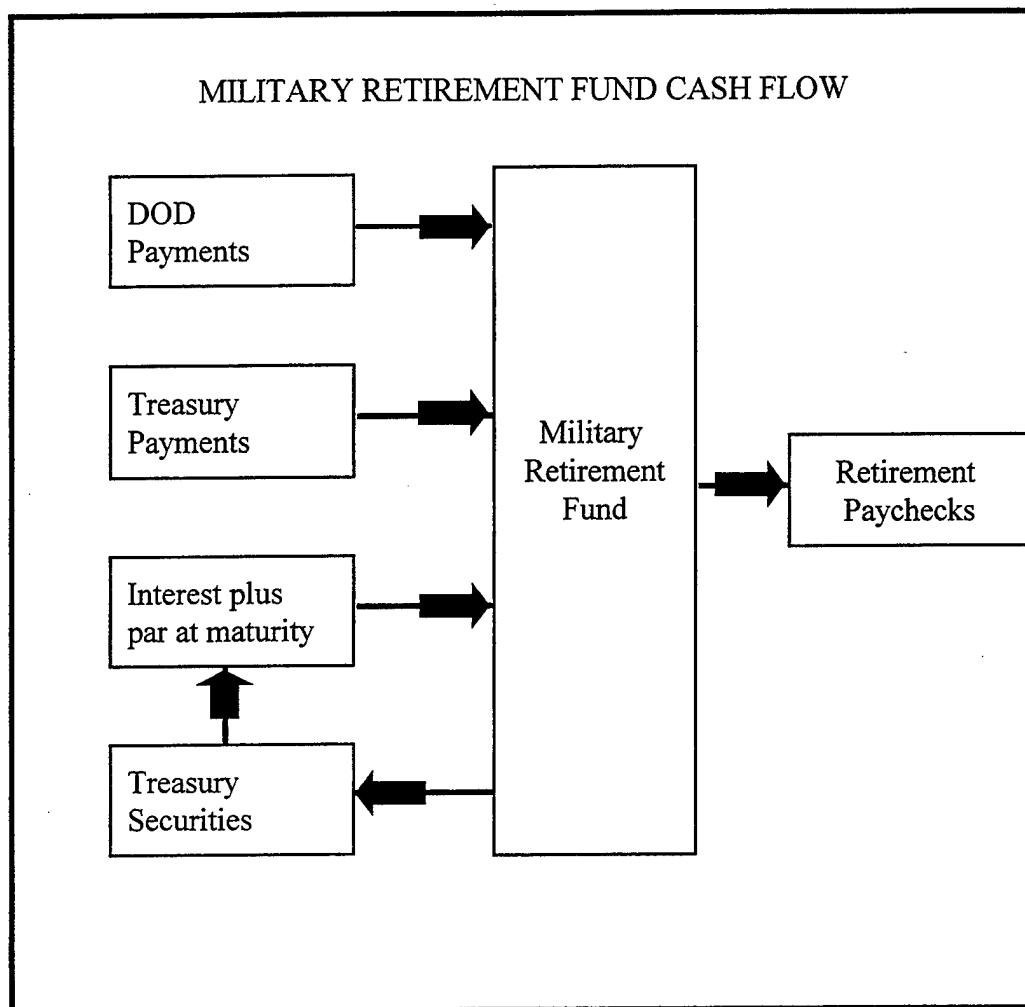
The Department of Defense is responsible for funding military retirement for those with service *after* the creation of the Military Retirement Fund. To fulfill this obligation, each Military Department annually budgets an amount, computed as a percentage of its basic pay account, to fund prospectively the proportion of future retired pay attributable to service rendered in the budget year. (Ref. 10, p. 3)

In summary, the Department of the Treasury transfers an amortized payment to the Military Retirement Fund at the beginning of each fiscal year in support of the unfunded liability for those members with service rendered prior to the creation of the Military Retirement Fund. The Department of Defense allocates funds to the Military Retirement Fund at the end of each month, based on actuarial estimates, for those

members with service rendered after the creation of the fund. Transfers into the fund qualify as intragovernmental transfers and thus have no effect on the deficit. Only payments to retirees from the fund represent outlays to the federal government. (Ref. 9, p.

1)

The flow of retirement funds is summarized in Figure 2.1 below.



Source: Hix and Taylor, A Policymaker's Guide to Accrual Funding of Military Retirement, 1996

Figure 2.1

III. BACKGROUND OF THE FEDERAL EMPLOYEE RETIREMENT SYSTEM

A. PURPOSE OF FEDERAL EMPLOYEE RETIREMENT

There are currently more than thirty federal retirement programs in existence. This thesis concentrates on the Civil Service Retirement System (CSRS) and its successor the Federal Employee Retirement System (FERS) because they are the two largest retirement systems for federal civilian employees. Together, CSRS and FERS covered about 2.8 million federal employees at the beginning of fiscal year 1995. (Ref. 11, p. 2)

The basic objective of the CSRS and FERS programs is to attract quality employees into federal jobs by offering a competitive total compensation package (retirement compensation included) that provides for a secure retirement and takes into consideration an inherent responsibility to the nation's taxpayers.

B. CURRENT FEDERAL EMPLOYEE RETIREMENT SYSTEMS

Although CSRS and FERS both provide pensions for retired federal employees, the programs are designed differently. CSRS was established in 1920 and predates the Social Security system by 15 years. When the Social Security system was established, Congress decided that employees in CSRS would not be covered by Social Security through their federal employment. CSRS is a stand-alone pension program that provides a retirement annuity based upon a formula. The program was closed to new entrants after December 31, 1983.

FERS was implemented in 1987, and generally covers those employees who first entered federal service after December 31, 1983 as well as those who transferred from CSRS to FERS. For those employees who entered federal service during the 3-year interim between January 1984 and January 1987, a "CSRS offset" plan was instituted whereby employees were covered by both CSRS and Social Security. Under this arrangement, the Social Security benefits they received from their federal service were deducted from their CSRS contributions and benefits, respectively. After FERS became operational in 1987, members and employees in CSRS and the offset plan were given the option to switch to FERS. (Ref. 14, p. 6)

The primary impetus for the new program was the Social Security Amendments of 1983, which required that all federal employees hired after December 31, 1983 be covered by Social Security. (Ref. 3, p. 6) Other factors that motivated the transition from CSRS to FERS were the cost of CSRS and the prevalent trend in the private sector of pension programs migrating from defined benefit to defined contribution plans. To clarify the difference between defined benefit and defined contribution plans, pension benefits in defined benefit plans are generally based on a formula of years with an organization, age at retirement, and salary averaged over some number of years. The employer bears the risk associated with insuring benefits specified in the formula. In defined contribution plans, employers generally promise to make guaranteed periodic contributions to workers' accounts, but retirement benefits are not specified. (Ref. 15, p. 3) The level of benefits will be a function of the success of the investments funded with these contributions. The risk of insuring an adequate benefit is shifted to the employee. Additionally, with defined

contribution plans, employees are usually required to make periodic contributions.

1. Civil Service Retirement System (CSRS)

The CSRS was the first retirement program for employees in the federal civil service and is applicable to those employees who entered federal service prior to January 01, 1984. CSRS is a defined benefit, contributory retirement system. (Ref. 12, p. 2) The retirement benefit is *defined* because it is determined by a formula that is based on an employee's pay and years of service. The system is *contributory* in that employees share in the expense of the annuities to which they become entitled via a mandatory deduction from their salary.

a. Contributions

CSRS covered employees are required to contribute 7 percent of pay to CSRS. The employing agency matches the employee's contribution. This contribution rate is scheduled to change in the near future. The Balanced Budget Act of 1997, Public Law 105-33, signed by the President in August of 1997, modifies the contribution rates required for CSRS covered employees between now and the year 2002 as delineated in Table 3.1 below. (Ref. 13, p. 1) CSRS employees are not covered under the Social Security system, therefore they do not make contributions to the Social Security Fund. They are, however, required to pay the Medicare tax (currently 1.45 percent of pay). (Ref. 12, p. 2)

Table 3.1

Balanced Budget Act of 1997
Changes to CSRS Contribution Rates

Period Covered	CSRS Contribution Rate
Present thru December 1998	7.00%
January 1999 thru December 1999	7.25%
January 2000 thru December 2000	7.40%
January 2001 thru December 2002	7.50%

Source: Adapted from Ref. 13

In addition to these mandatory contributions, CSRS employees have the option of making voluntary contributions for their retirement to a government sponsored, tax-deferred Thrift Savings Plan (TSP). The FERS Act of 1986 introduced the TSP for all federal employees. CSRS participants may contribute up to 5 percent of their salary to the TSP. However, they are not eligible to receive matching contributions from the government. The TSP will be covered in greater detail in the next section.

b. Benefits

CSRS benefits are based on the employee's "high-3" average pay and years of service. (Ref. 12, p. 2) High-3 is calculated by taking the average of the highest 3 consecutive years of base pay. The monthly retirement benefit is computed by multiplying the high-3 average by 1.5 percent for each of the first 5 years of service, 1.75 percent for each of the next 5 years of service, and 2 percent for each year over 10 years of service. (Ref. 11, p. 61)

Eligibility for retirement benefits is based on the CSRS participant's age and years of service. Generally, a CSRS member may retire at age 55 with a minimum of 30 years of service, at age 60 with a minimum of 20 years of service, and at age 62 with a minimum of 5 years of service. To protect the purchasing power of CSRS retirees' annuities, benefits are adjusted annually to meet the increase in the Consumer Price Index (CPI).

2. Federal Employee Retirement System (FERS)

The Social Security Amendments of 1983 (Public Law 98-21), primarily intended to resolve financial difficulties in the Social Security system, had a significant effect on the retirement program for future federal employees. The amendments required that all federal civil employees hired since December 31, 1983 be covered by the Social Security program. From these amendments came the Federal Employees Retirement System (FERS) Act of 1986 (Public Law 99-335), putting FERS in place on January 1, 1987, and making it effective retroactively to January 1, 1984. The act gave employees covered by the previous retirement system (CSRS) a one time opportunity to transfer to FERS during an open season between July 1 and December 31, 1987. (Ref. 16, p. 8) Additional open seasons are being considered which would give CSRS employees another chance to convert from CSRS to FERS.

FERS is modeled after the more traditional pension plans of corporate and private sector entities. The ultimate design of FERS was determined after extensive analyses and applicability studies were conducted of non-federal retirement programs. FERS is a

three-tiered retirement plan comprised of Social Security benefits, a Basic Benefit Plan, and a Thrift Savings Plan. The transition from CSRS to FERS was consistent with the general trend in private industry of a gradual migration from defined benefit plans to defined contribution plans. FERS is essentially a three part plan, two parts defined benefit (Social Security and the Basic Benefit Plan) and one part defined contribution (Thrift Savings Plan). CSRS, as originally designed, is a one part defined benefit plan.

a. Social Security Benefits

Employees under FERS must contribute to and are covered by full Social Security taxes. The Social Security tax for 1998 is 7.65 percent (6.2 percent for retirement and 1.45 percent for Medicare) up to the maximum taxable wage base (\$65,400 in 1997). Annual earnings in excess of the maximum taxable wage base are not subject to the Social Security tax. (Ref. 12, p. 4)

The term "Social Security" means benefit payments provided to workers and their dependents who qualify as beneficiaries under the Old-Age, Survivors and Disability Insurance (OASDI) programs of the Social Security Act. An employee with FERS coverage falls under the purview of OASDI and is also covered under Social Security's Medicare Hospital Insurance program. Medicare pays a portion of hospital expenses incurred for those receiving Social Security retirement benefits at age 65 or older.

Monthly Social Security benefits are provided to those who have retired and are at least 62 years of age. The amount of monthly benefits is based on three fundamental factors. (Ref. 17, p. 3) The first factor is the average earnings upon which

Social Security taxes have been paid, adjusted over the years for changes in average earnings of the American work force. The second factor is family composition, e.g., the number of family members receiving Social Security benefits. The third factor is an annual adjustment based upon the Consumer Price Index (CPI).

b. Basic Benefit Plan

The Basic Benefit Plan (BBP) is the second defined benefit portion of the FERS program. As with CSRS, the FERS annuity is based on length of service and high-3 average pay. Both CSRS and FERS employees are required to contribute 7 percent of their pay towards retirement. FERS employees contribute 0.8 percent of their pay to the BBP and 6.2 percent to Social Security since they are entitled to Social Security benefits for a total of 7 percent of pay. (Ref. 11, p. 62) CSRS employees are not entitled to Social Security benefits, therefore their entire 7 percent contribution goes to the CSRS fund. Civilian employees in private sector retirement programs must also contribute 6.2 percent of their salaries to Social Security.

Eligibility to collect retirement benefits from the BBP is determined by age and number of years of creditable service. FERS members are entitled to immediate retirement benefits from the BBP if they are 62 years of age with 5 years of service, 60 years of age with 20 years of service or they meet the Minimum Retirement Age (MRA) requirement and have 30 years of service. MRA is based on the year a member was born. Table 3.2 below delineates the MRA for FERS members.

Table 3.2

Minimum Retirement Age Based on Year of Birth

Year of Birth	Minimum Retirement Age (MRA)
Prior to 1948	55
1948	55 and 2 months
1949	55 and 4 months
1950	55 and 6 months
1951	55 and 8 months
1952	55 and 10 months
1953 through 1964	56
1965	56 and 2 months
1966	56 and 4 months
1967	56 and 6 months
1968	56 and 8 months
1969	56 and 10 months
1970 and after	57

Source: Adapted from FERS Handbook

FERS members are entitled to a reduced benefit if they meet the MRA requirement from Table 3.2 and they have at least 10 but less than 30 years of service.

As mentioned earlier, the retirement benefit amount is based on the high-3 average pay. High-3 is determined by averaging a member's highest basic pay over any three consecutive years of creditable service. The benefit is calculated by multiplying 1 percent of high-3 average by the number of years of creditable service. If a member retires at age 62 or later with at least 20 years of service, a factor of 1.1 percent is used rather

than 1 percent. (Ref. 17, p. 7) The reduced benefit for those members that meet the MRA and have at least 10 but less than 30 years of service is determined by reducing the benefit by 5 percent for each year under age 62. (Ref. 17, p. 6)

FERS retirees who are age 62 or older, receive an annual Cost-of-Living Adjustment (COLA). The amount of the annual COLA is based on the percentage increase of the Consumer Price Index (CPI). Table 3.3 summarizes the guidelines for annual COLA increases.

Table 3.3

FERS Cost of Living Adjustments

Increase in CPI	Annual COLA Increase
Up to 2%	Same as CPI
2% to 3%	2%
3% or more	CPI increase minus 1%

Source: Adapted from FERS Handbook

c. Thrift Savings Plan (TSP)

The Thrift Savings Plan (TSP) is the third and final leg of the FERS triad. It is a pure defined contribution plan that enables federal employees to save for retirement and reduce current taxes since all contributions are tax-deferred. Federal employees may not obtain funds from their accounts before retirement except through a loan program. TSP is administered by the Federal Thrift Investment Board, which is an independent

agency. The Board consists of five part-time members who are appointed by the President. TSP's daily activities are carried out by a staff headed by an executive director selected by the Board. (Ref. 18, p. 4) Retirement benefits from TSP are the flexible component of FERS because the amount accrued is dependent on contribution levels, investment options chosen by the FERS employee and the success of the investments.

Employees under FERS are automatically enrolled in TSP because federal agencies are required to contribute an amount equal to 1 percent of their employees' salaries to the plan. In addition, employees can make voluntary contributions up to 10 percent of their salaries. Agencies match the first 3 percent on a dollar-for-dollar basis and the next 2 percent at 50 cents to a dollar for a total agency contribution of 5 percent ($1\% + 3\% + (2\% \times .5)$). Additional employee contributions are not matched, but all contributions (up to 10% of their salaries) and earnings are tax-deferred. (Ref. 18, p. 4) (Employees in private sector retirement programs that include defined contribution plans typically must contribute about 6 percent of their salaries to receive maximum employer contributions to their defined contribution plans. (Ref. 11, p. 38)) As mentioned in the previous section, CSRS employees may also participate in TSP by contributing up to 5 percent of their salaries. While there is no agency match, the contributions and earnings are tax-deferred. Table 3.4 summarizes TSP contribution and agency matching percentages.

Table 3.4

FERS TSP Employee Contributions/Agency Contributions

Employee Contribution	Agency Contribution
0	1% of Basic Pay
First 3% of Basic Pay	Dollar for dollar match
Next 2% of Basic Pay	Fifty cents for each dollar
Next 5% of Basic Pay	No contribution

Source: Adapted from Federal Pensions: TSP Has Key Role in Retirement Benefits,
United States General Accounting Office, 1995

There are three investment options available to FERS employees making contributions to the TSP. They are commonly referred to as the G, F, and C funds. The funds differ in the rate of return and amount of risk involved. The amount or type of investment for new contributions can be changed twice a year during open seasons, announced by the Thrift Investment Board. In addition, the allocation among the three funds can be changed in conjunction with each open season.

The G fund consists of investments in short-term nonmarketable U.S. Treasury securities specially issued to the plan. All investments in the G fund earn interest at a rate that is equal to the average market rates of return on U.S. Treasury marketable securities outstanding with four or more years to maturity. The G fund would be considered the least risky of the three funds.

The F fund contributions are invested in fixed income securities such as notes, bonds, or other obligations which return the amount invested and pay interest at a specified rate over a given period of time. (Ref. 17, p. 13) The F fund involves more risk than the G fund. Rates of return are dependent on the interest rate environment. Generally, in a declining interest rate environment, rates of return for the F fund would be higher than in a rising interest rate environment.

The C fund gives participants the opportunity to participate broadly in the U.S. stock markets. The C fund is managed by a private sector investment manager that is competitively selected by the Thrift Investment Board. (Ref. 17, p. 13) Contributions are invested in a stock index with the potential to achieve a high, long term rate of return. The C fund is the most risky of the three fund options but also has the greater potential for higher returns.

Table 3.5 depicts the allocation of TSP contributions between the three funds as of January of 1995.

Table 3.5

TSP Investments as of January 1995

Fund	Dollar Amount (Billions)	Percent of TSP
G fund	\$18.9	70%
F fund	\$1.6	6%
C fund	\$6.4	24%
Total	\$26.9	100%

Source: Federal Pensions: TSP Has Key Role in Retirement Benefits, United States
General Accounting Office, 1995

Figure 3.1 graphically illustrates the growth of a \$1000 investment in each of the TSP funds from 1987 to 1994. The C fund has averaged 12.14 percent rate of return per year while the G and F funds have averaged 7.9 and 7.7 percent, respectively, over the 7 year period.

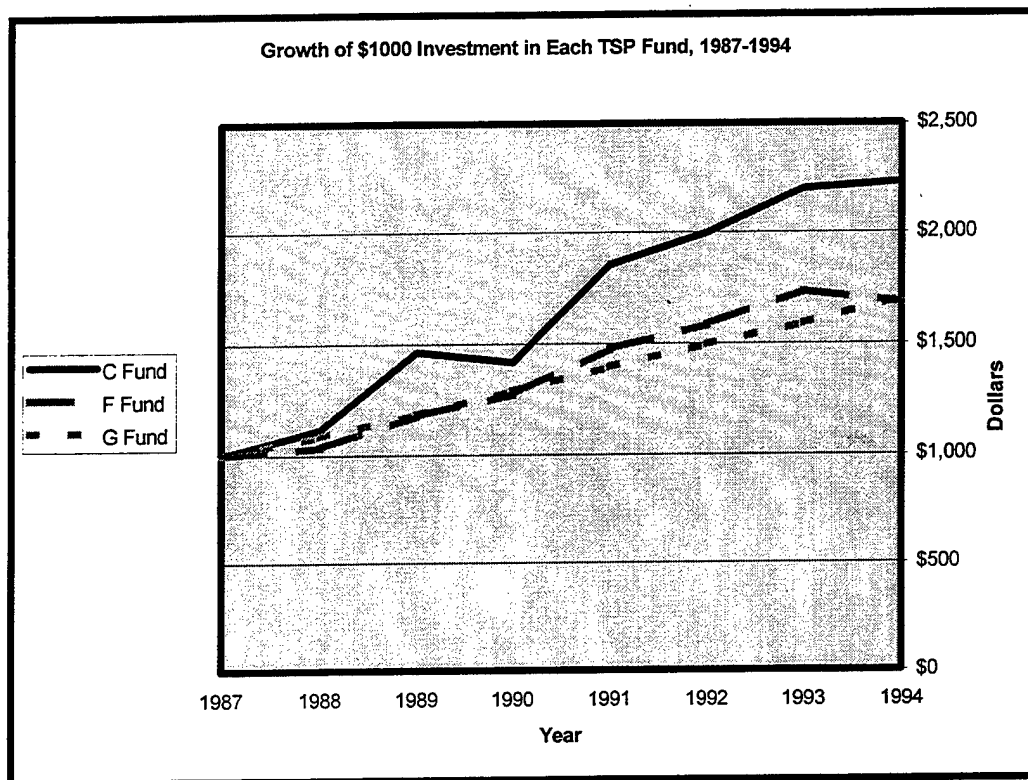


Figure 3.1

Source: Sullivan, Michael J., *Your Thrift Savings Plan*, Federal Employees News Digest, Inc. Publication, 1995

C. CSRS AND FERS FUNDING

There are many similarities in the manner in which CSRS and FERS are financed, as noted, but there are significant differences as well. CSRS and the FERS pension plan require employees to contribute towards system costs. (Ref. 19, p. 1) The remaining costs

of these systems are funded by taxpayers who are paying for the government services they receive.

CSRS and the defined benefit portion of FERS pension benefits are paid out from the Civil Service Retirement and Disability Fund (CSRDF). CSRDF is financed by the employee's federal agency and contributions made by the employee. The fund's investments consist solely of U.S. government securities.

Both CSRS and the FERS pension plan are "funded" programs, in that amounts are set aside (in the CSRDF) from which benefit payments are made. Both plans are funded using a "normal cost" approach. Normal cost is expressed as a percentage of payroll and represents the amount of money that should be set aside during an employees' working years sufficient, with investment earnings, to cover future benefit payments. Normal cost calculations require that many assumptions be made about the future, including mortality rates, retirement rates, interest rates, salary increases, and cost of living increases over the lifespans of current and future retirees. (Ref. 14, p. 13)

The amounts that employees in CSRS and their agencies contribute to CSRDF are approximately equal to the system's "static" normal cost, that is, the cost of future benefits calculated under the assumptions that federal pay schedules would not increase and cost of living adjustments would not be made for retirees. When normal cost is calculated on a "dynamic" basis, including future pay increases and cost of living adjustments, the normal cost percentage nearly doubles. Because of the manner in which CSRS costs are determined and funded, the system has accumulated a sizeable unfunded liability. This unfunded liability is dealt with by the statute that established FERS in

1986. The statute requires that, when the budget authority in the retirement fund for CSRS benefits is exhausted, automatic annual appropriations will be made to amortize the shortfall over 30 years. Thus, provisions have been made for the retirement fund to always have sufficient budget authority to cover future benefit payments. (Ref. 19, p. 2)

Unlike CSRS, the FERS pension plan is funded on a *dynamic* normal cost basis. Future pay increases and cost of living adjustments *are* considered. Agencies are required to contribute the difference between dynamic normal cost and employee contributions to the CSRDF to minimize any future unfunded liability. Employee contributions are static.

The normal cost of CSRS is 25.14 percent of payroll (employee contribution=7%, employer contribution=18.14%). Based on revised actuarial assumptions, the normal cost of FERS is 12.2 percent of payroll (employee contribution=0.8%, employer contribution=11.4%) for the FERS defined benefit portion. Under FERS, the employer also contributes to Social Security and TSP. In the aggregate, the normal cost of the FERS defined benefit, TSP, and Social Security is similar to the normal cost of CSRS employee's benefits. (Ref. 20, p. 25-27)

IV. HISTORY OF THE MILITARY RETIREMENT SYSTEM

A. INTRODUCTION

The current structure and level of retirement benefits for members of the U.S. military are the result of more than a century of modifications to the military retirement system. Many of the modifications have reflected changing social attitudes and concerns about retaining capable military personnel. (Ref. 21, p. 4) More recently, changes have been influenced by budget deficits and fiscal pressures.

The seed for the military retirement system was planted nearly 145 years ago. Since then the system has undergone many legislative changes, been scrutinized by several major studies and has grown to its current level of providing retirement benefits for approximately 1.5 million retirees at a cost of \$25 billion per year. This chapter will examine the major legislative changes to the military retirement system from 1855 to present and discuss the impetus behind these changes. Emphasis is placed on changes to the retirement system for officers with some mention of major changes to enlisted personnel retirement policies. Appendix A provides a brief chronological summary of these major changes.

B. LEGISLATIVE HISTORY

1. 1855 to 1910

The Act of February 28, 1855, while not a retirement statute as such, permitted the Secretary of the Navy to convene examining boards to determine the capability of officers for "performing promptly and efficiently all their duties both ashore and afloat" and to remove any officer determined not capable of performing such duty from the active list. Officers removed from active duty under this provision were placed on a "reserved list" and paid a percentage of their pay (50 to 75 percent), unless it was determined that the officer was himself to blame for the incapacity, in which case he was to be "dropped from the rolls" without pay. (Ref. 5, p. 511) While the intention of this Act was to remove physically unfit officers from active duty (disability compensation), it was the first legislation that gave the Secretary of the Navy the ability to remove old and disabled officers from active duty and still provide them with a reduced benefit.

The Act of August 3, 1861, authorized the *voluntary* retirement, at the discretion of the President, of regular officers of all branches of service after 40 years of duty. The Act of December 21, 1861, permitted the *involuntary* retirement of Navy officers after 45 years of service or at age 62 while the Act of July 17, 1862, permitted the same for Army and Marine Corps officers. (Ref. 5, p. 512) While these laws authorized the services to require the retirement of officers meeting certain criteria, they did not mandate that the services exercise their authority.

The Act of July 15, 1870, authorized the voluntary retirement, at the discretion of the President, of Army and Marine Corps officers after 30 years of service. Thirty-eight

years later, the Act of May 13, 1908, authorized the same for Navy officers.

The Act of June 30, 1882, made retirement mandatory at age 64 for officers of all branches of service. This act also gave officers an absolute right to voluntary retirement after 40 years of service. Earlier laws had given the President the power to grant or deny such retirement. (Ref. 5, p. 513)

The history of retirement legislation for enlisted personnel dates back to the Act of February 14, 1885, which authorized the voluntary retirement of Army and Marine Corps enlisted personnel after 30 years of service. The Act of March 3, 1899, did the same for Navy enlisted personnel. Furthermore, the Act of March 2, 1907, consolidated the 30 year voluntary retirement authority for enlisted personnel of all branches of service. Retired pay was fixed at 75 percent of active duty pay, plus an allowance in lieu of quarters, fuel, and light. (Ref. 5, p. 518)

2. 1910 to 1945

The Act of August 29, 1916, brought two new principles to the military retirement system. First, it established a retirement program integrated with an up-or-out selective promotion plan. This basic principle is still in effect today. Under this Act, a Navy Captain who reached age 56 without being selected for the next higher grade became ineligible for further promotion consideration and had to be retired. The corresponding ages for Commanders and Lieutenant Commanders were 50 and 45, respectively. Second, it initiated use of the formula that was, until 1980, the basis for determining retired pay entitlements. Namely, 2.5 percent of final monthly basic pay for each year of service up to

30, or a maximum of 75 percent of basic pay. (Ref. 5, p. 513)

For enlisted personnel, the Act of August 29, 1916, created the Fleet Naval Reserve to provide a pool of experienced personnel who could be recalled to active duty on short notice in time of war or emergency. The Act permitted enlisted personnel of the Navy to voluntarily transfer to the Fleet Reserve after 16 or more years of active service. Those with between 16 and 20 years of service were entitled to "retainer" pay equal to one-third of their base pay and longevity pay. Those with 20 or more years of service were entitled to one-half their base pay and longevity pay. The Act of February 28, 1925, fixed the minimum length of service required for transfer to the Fleet Reserve at 20 years. (Ref. 5, p. 518) Pay received by Fleet Reserve members became known as "retainer" pay rather than "retired" pay. For practical purposes, retainer pay and retired pay are synonymous.

The Act of June 22, 1926, replaced the Navy's *age-in-grade* promotion program with one based on *service-in-grade*. Under this Act, a Captain who had completed 35 years of service without being selected for promotion became ineligible for further consideration and had to be retired. The break points for Commanders and Lieutenant Commanders were 28 years and 21 years, respectively. The Act of July 22, 1935, further extended this principle to Lieutenants and Lieutenant (junior grades) who had not been selected for promotion by the 14 and 7 year points, respectively. (Ref. 5, p. 514)

The Act of July 31, 1935, authorized the voluntary retirement of Army officers after 15 years of service, with retired pay of 2.5 percent for each year of service. This 15 year authority was intended as a temporary measure to help relieve an officer "glut"

created by a large influx of World War I officers into the Regular Army. The 15 year authority, though suspended during World War II, remained in effect until 1948.

The Act of June 23, 1938, became the model for the present promotion and retirement system. The Act required that Captains, Commanders, and Lieutenant Commanders who had twice failed for selection to the next higher grade be retired after 30, 28, and 26 years of commissioned service, respectively. The Act also authorized the voluntary retirement of Navy officers after 20 years of commissioned service. (Ref. 5, p. 515)

3. 1945 to 1981

The Act of February 21, 1946, lowered the statutory retirement age for Navy and Marine Corps officers from 64 to 62. It also authorized the Secretary of the Navy to convene boards to consider and recommend officers for involuntary retirement. The purpose of the Act was to provide a means to break up the officer logjam that had arisen out of the large number of World War II accessions who could no longer be effectively employed. (Ref. 5, p. 515)

The Army and Air Force Revitalization and Retirement Equalization Act of 1948, authorized the voluntary retirement of Army and Air Force officers after 20 years of service. This law resulted, for the first time in history, in uniform *voluntary* retirement authority among the officers of all branches of service. Though officer retirement policies differed between the Army/Air Force and Navy/Marine Corps, the Officer Personnel Act of 1947 was the first act to incorporate all of the service's *involuntary* retirement systems

into a single piece of legislation. Table 4.1 summarizes these differences.

Table 4.1

Officer Personnel Act of 1947
Involuntary Retirement Provisions

Pay Grade	Army and Air Force	Navy and Marine Corps
0-10, 0-9	Retired after 5 years in grade <i>or</i> 35 years of service, could be deferred to age 64.	Retired after 5 years in grade <i>and</i> 35 years of service, could be selected for continuation.
0-8	Retired after 5 years in grade <i>or</i> 35 years of service, could be deferred to age 60.	Retired after 5 years in grade <i>and</i> 35 years of service, could be selected for continuation.
0-7	Retired after 5 years in grade <i>or</i> 30 years of service, could be deferred to age 60.	Rear Admiral (lower half)-retired after 5 years in grade <i>and</i> 35 years of service, could be selected for continuation. Brigadier General-retired after second failure of selection.
0-6	Retired after 5 years in grade <i>or</i> 30 years of service.	Retired after 30 years of service if twice failed for selection to 0-7. Otherwise, after 31 years.
0-5	Retired after 28 years of service.	Retired after 26 years of service if twice failed for selection to 0-6.
0-4, 0-3	When twice passed over for promotion: retired if 20 or more years of service; retained to complete 20 years if within 2 years of 20 year point; eliminated with severance pay if less than 18 years of service.	Retired after 20 years of service if twice failed for selection. All others eliminated with severance pay if twice failed for selection.

Source: Adapted from the Military Compensation Background Papers, Office of the Secretary of Defense, 1996

While most of the differences in Table 4.1 appear to be small, the legislators behind the Defense Officer Personnel Management Act (DOPMA), passed on December 12, 1980, believing that the apparent differences in the treatment accorded officers in different branches of service did not in fact reflect "actual management needs," set out to provide unified retirement authority in an effort to make the career expectations of members more clearly defined and uniform across services. (Ref. 5, p. 516) Table 4.2 summarizes the unified retirement provisions of DOPMA.

Table 4.2

DOPMA Unified Retirement Provisions

Pay Grade	Retirement Provisions
0-10, 0-9	Retired at age 62 unless specially selected for continuation, but not past age 64.
0-8	Retired after 5 years in grade or 35 years of service, whichever provides for the most years of service, unless specially selected for continuation.
0-7	Retired after 5 years in grade or 30 years of service, whichever provides for the most years of service, unless specially selected for continuation.
0-6	Retired after 30 years of service unless specially selected for continuation or upon a list of officers recommended for promotion.
0-5	Retired after 28 years of service unless specially selected for continuation or upon a list of officers recommended for promotion.
0-4, 0-3	When twice passed over for promotion: retired if 20 or more years of service; retained to complete 20 years if within 2 years of 20-year point. All others discharged with separation pay if eligible.

Source: Adapted from the Military Compensation Background Papers, Office of the Secretary of Defense, 1996

In addition to the above, officers in pay grades 0-8, 0-7, and 0-6 who had at least four years in grade and were not on a list recommended for promotion, together with officers in pay grade 0-5 who twice failed for selection to 0-6, could be considered for selective early retirement. (Ref. 5, p. 517)

4. 1981 to present

The Department of Defense Authorization Act of 1981 effected the first major change in the computation of retired pay since uniform voluntary retirement authority was adopted for all branches of service in the Army and Air Force Vitalization and Retirement Equalization Act of 1948. Under the 1981 Authorization Act, the retired pay of any member of an armed force who first became a member on or after the date of enactment of the Act (September 8, 1980) was computed on the basis of an average of the member's highest three years of basic pay. This basis was commonly referred to as "High-3". Persons who were members of the armed forces before the date of enactment were excluded from the new computational method for determining retired pay in order to avoid changing the retirement rules after members had made career decisions on the basis of preexisting retirement rules and out of concern that such a change could have an adverse effect on the retention of certain critical classes of personnel. (Ref. 5, p. 520) This significant change was brought about by fiscal pressures, a swelling national debt and the accelerating costs associated with military retired pay.

In an attempt to further contain what was generally perceived as rapidly mounting military retirement cost liabilities, Congress enacted the Department of Defense Authorization Act of 1984. This Act established the Department of Defense Military Retirement Fund which instituted an accrual accounting system for retired pay. The Fund was established to give Congress and the Department of Defense direct and immediate information on the future retirement costs associated with current manpower decisions. (Ref. 5, p. 520)

The Military Retirement Reform Act of 1986 came about as a result of additional pressures to moderate and reduce costs of what was perceived by the general public as an extremely generous retirement system. The features of this Act, commonly referred to as "REDUX," applied to those who first became members of the uniformed service on or after August 1, 1986. In general terms, the Act lowered the percentage multipliers used in determining the initial retired pay for those members joining after August 1, 1986, except for members who do not retire until they reach age 62 or retire with 30 years of creditable service. The Act also reduced the annual cost of living adjustment by providing the Consumer Price Index (CPI) minus one percentage point for life with a one time restoral in the purchasing power at age 62. (Ref. 5, p. 523) Table 4.3 provides a comparison of percentage multipliers used to determine initial retired pay for pre-REDUX and post-REDUX members. Note that pre-REDUX members also include those members entering service before September 8, 1980. Although the same multiplier is used, a different basis applies. Also note the one time adjustment for REDUX members at age 62.

Table 4.3

Multipliers Used for Pre-REDUX and REDUX Members

Years of Service	Pre-REDUX	REDUX Before Age 62	REDUX After Age 62
20	50.0	40.0	50.0
21	52.5	43.5	52.5
22	55.0	47.0	55.0
23	57.5	50.5	57.5
24	60.0	54.0	60.0
25	62.5	57.5	62.5
26	65.0	61.0	65.0
27	67.5	64.5	67.5
28	70.0	68.0	70.0
29	72.5	71.5	72.5
30	75.0	75.0	75.0

Source: Adapted from the Military Compensation Background Papers, Office of the Secretary of Defense, 1996

The National Defense Authorization Act for Fiscal Year 1993 adopted early retirement authority for members with between 15 and 20 years of service at the discretion of each service. The Act was initially effective through 1995 and was meant to be used as a force management tool to assist the services during the active force drawdown period. In 1994 Congress extended the termination of this Act to October 1, 1999. A member whose application for early retirement is accepted becomes entitled to a reduced retired pay, effectively adjusting the multiplier for the number of years of service

less than 20.

C. CONCLUSION

Military retirement has undergone many modifications since its emergence in the mid-1800's. What started out as a piecemeal, service-specific system designed to assist each service with its personnel management, eventually evolved into the consolidated military retirement system that we know today. Many of the early modifications reflected the need to retain capable military personnel for the potential defense of our nation's interests. More recent modifications have been influenced by budget deficits, fiscal pressures and an attempt to moderate the appearance of a retirement system that is perceived by many to be overly generous when compared to the private sector.

V. HISTORY OF THE CIVIL SERVICE AND FEDERAL EMPLOYEE RETIREMENT SYSTEMS

A. INTRODUCTION

The Civil Service Retirement System (CSRS) was established in 1920 and predates the Social Security system by 15 years. When the Social Security system was established, Congress decided that employees in CSRS would not be covered by Social Security through their federal employment. (Ref. 3, p. 6)

The Federal Employee Retirement System (FERS) was implemented in 1987 and generally covers those employees who first entered federal service after 1983 as well as those who transferred from CSRS to FERS. The primary impetus for the new program was the Social Security Amendments of 1983, which required that all federal employees hired after December 1983 be covered by Social Security. (Ref. 3, p. 6)

Other factors that influenced the transition from CSRS to FERS were the cost of CSRS and the prevalent trend in the private sector of pension programs migrating from defined benefit to defined contribution plans. This transition has placed greater responsibility on the employee to fund their own retirement program. This chapter will examine the major changes to these two retirement systems. Appendix B summarizes major changes to federal employee retirement systems.

B. CSRS HISTORY

CSRS was established in 1920. It was the first retirement program for employees in the federal civil service and was born out of the pressing need to remove permanently tenured personnel from employment who could no longer perform effectively because of age or infirmities. Many aged employees had become inefficient in their work and incompetent for continued service. Because most elderly workers had not been able to make provisions for their retirement, and because isolated instances of removing them had drawn adverse public reaction, it was very difficult to induce managers to dismiss them. As a result, prior to 1920, an unofficial, unauthorized pension system had evolved that simply retained on the employment payrolls, under various pretexts, all aged employees with many years of service and continued paying them full salary for little or no work. This practice impaired the efficiency of government operations and retarded the advancement of more competent employees. (Ref. 14, p. 3) The need for a formal system had emerged.

1. CSRS Retirement Provisions

When initially enacted, CSRS provided two types of retirement, *mandatory* and *disability*. Mandatory retirement was set at age 70. If an employee had completed at least 15 years of service at that age, they were paid annuities. Disability retirement annuities were paid to all employees with at least 15 years of service who became totally disabled for useful and efficient service before reaching the mandatory retirement age (70). (Ref. 14, p. 3)

In 1930 *optional* (voluntary) retirement provisions were added. This provision allowed federal employees with 30 years of service to retire 2 years earlier (age 68) than the mandatory

retirement age, with no reduction in their annuity. The legislators at the time reasoned that this provision would improve government efficiency by getting rid of inefficient personnel earlier and at the same time make room for additional hires.

In 1942 the optional retirement provisions were liberalized even further. A federal employee could voluntarily retire at age 60 with 30 years of service, at age 62 with 15 years of service, and between ages 55-60 with 30 years of service and a reduced annuity. The legislators effected these changes because other public retirement systems provided options for earlier retirement and they reasoned that with earlier retirement options, fewer employees would retire via disability, thus reducing administrative costs. (Ref. 14, p. 3)

The current CSRS optional retirement provisions were adopted in 1956 and 1967. In 1956 the option of voluntarily retiring at age 62 with 15 years of service was changed to age 62 with 5 years of service. In 1967 the annuity reduction for those electing to retire as early as age 55 was eliminated (allowing retirement at age 55 with 30 years of service) and the service requirement for optional retirement at age 60 was changed from 30 to 20 years of service.

2. CSRS Annuity Computations

An annuity formula was first used in 1926. A CSRS retiree's annuity was based on their average salary for their final 10 years of service and years of service. In 1930 the salary base was changed from the average salary for the final 10 years of service to the average salary for the highest 5 consecutive years of service. This salary basis became known as "high-5".

In 1956 the current 3-step benefit formula was adopted. Benefits were calculated by multiplying the high-5 salary base by 1.5 percent for each of the first 5 years of service, by 1.75

percent for the next 5 years of service and by 2 percent for every year of service greater than 10. In 1969 the salary base was changed from high-5 to "*high-3*". The rationale for this change was to keep federal employees from working beyond their effective years for the purpose of enhancing their retirement pay. The 3-step high-3 formula remains in effect today.

In the interest of cost reduction, there have been several additional changes to the CSRS statute that have reduced its costs substantially. Most of the savings have come from changes to the retiree cost-of-living adjustment (COLA) provisions. From 1969 to 1976, CSRS COLAs were based on monthly increases in the Consumer Price Index (CPI), and a 1 percent "kicker" was added to each adjustment. The 1 percent "add-on" was eliminated in 1976 to reduce federal employee retirement costs. (Ref. 14, p. 3)

C. FERS HISTORY

FERS has a much shorter history than CSRS. It was adopted because the Social Security Amendments of 1983 brought all federal civilian employees first hired after December 1983 under Social Security. The amendments were primarily intended to resolve financial difficulties in the Social Security system, but they also had the effect of requiring that a new federal retirement program be developed to supplement the benefits new employees would earn from Social Security. (Ref. 14, p. 5) In a December 1982 report on the Civil Service Pension Reform Act prepared by the Subcommittee on Civil Service, Post Office, and General Services of the Senate Committee on Governmental Affairs, Chairman Ted Stevens stated the following in his opening remarks:

Our retirement system (CSRS) has come under increasing attack in recent years. Many of the benefits we once enjoyed no longer exist. I believe this attack will continue to the point where the retirement system's benefits will be emasculated, unless we come up with an alternative....We anticipate that federal employees will be placed under Social Security soon, a move I have opposed. However, when that occurs, I believe we should turn this loss into a net gain for federal employees. For that reason, I have suggested an alternative--to establish a new system (FERS) for new workers, which current workers may join, while leaving the current system intact for all current workers who prefer to remain in it.....The new system should be less costly and more closely patterned after private sector plans. In this way, the new system will not be subjected to cost-cutting necessities. Establishing such an alternative system may be the only way to protect the current system from further substantive change. (Ref. 22, p. III)

The Federal Employees Retirement System (FERS) Act of 1986 (Public Law 99-335) officially put FERS in place on January 1, 1987, and made it retroactive to January 1, 1984. The act gave employees covered by the previous retirement system (CSRS) a one time opportunity to transfer to FERS during an open season between July 1 and December 31, 1987. (Ref. 16, p. 8) The ultimate design of FERS was determined after extensive analyses of non-federal retirement programs and how non-federal practices could be applied in the government. (Ref. 14, p. 5) FERS adopted the approach of providing a three-tiered system consisting of Social Security, a defined benefit pension plan, and a Thrift Savings Plan in which employees could participate to strengthen their retirement package. This approach resembled the trend in private sector corporations of putting a portion of retirement responsibility on the employee. At the same time, it reduced the burden on U.S. taxpayers for wholesale funding of federal employee retirements.

VI. STATUS OF CURRENT SYSTEMS

A. INTRODUCTION

This chapter will examine current issues and topics of discussion regarding the respective retirement systems and associated benefits for military and civil service personnel. Trends as well as prospective legislation will be addressed. Additionally, the possibility of applying defined contribution elements of the Federal Employee Retirement System to the current military retirement system will be considered.

B. MILITARY RETIREMENT SYSTEM

With the increasing emphasis on fiscal efficiency and ensuring that taxpayers are getting the "best value" for their tax dollars, the military retirement system has been subject to considerable scrutiny from legislators and the general public. For Fiscal Year 1997, 1.31 million non-disability retirees from active duty were paid \$24.94 billion. (Ref. 23, p. 2) With this figure projected to increase in coming years, the trend of continued scrutiny and further reductions to military retirement benefits is a distinct reality.

Because the combination of the 1980 and 1986 changes to the military retirement system reduced the lifetime value of a military pension by 25 percent, many service leaders and veterans associations have worried that Congress cut too deeply into this important career incentive to sustain long-term retention and readiness. A recent article in the *Navy Times* indicates that service members are just now starting to grasp the true effects of REDUX.

As the first generation of sailors, soldiers, airmen and marines under the 40 percent plan reach the critical 12 year mark, many are deciding that the retirement plan that lies ahead of them isn't worth waiting for. Many others are deciding that the lure of a scaled-back retirement check simply is not worth the hassles of remaining in an increasingly busy, deployed and understaffed Navy.....Even the service chiefs of staff said at a recent congressional hearing that the decision more than a decade ago to cut the overall value of military retirement by more than 25 percent is hurting them and may need to be revisited. (Ref. 24, p. 12)

In his mark-up of the Fiscal Year 1999 Defense Authorization Act, Congressman Steve Buyer, Chairman of the Military Personnel Subcommittee, stated in his opening remarks, "The service chiefs gave me an overwhelming YES when I asked them if it was time to reassess the 1980 and 1986 reductions to the military retirement system....My mark will call for DOD to examine the implications for retention of the 1980 and 1986 changes to the retirement system and submit a report." (Ref. 36, p. 3)

A recent reprogramming effort within the Military Personnel, Navy (MP,N) Account for Fiscal Year 1998, stressed the urgent need for additional dollars to support retention and recruiting. With the strong economy, low unemployment and the drawdown nearly complete, recruiters are having a difficult time meeting accession goals to fulfill required end strength. (Ref. 25) There are some who believe that the reduced retirement benefit has contributed to accession and retention problems; however, to date, almost no data has been compiled within the Defense Department to indicate that the reduced retirement plan is a factor in these problems. (Ref. 24, p. 12)

A substantial majority of legislators remain more predisposed to further cutbacks than to adding improvements or maintaining the status quo. In the last 25 years, virtually all legislative changes affecting military retirement have been aimed at curtailing retirement spending. In the last four years alone, there have been 17 *proposals* that *would* have substantially reduced military retirement benefits, 14 of which would have further reduced the post-1986 (REDUX) system. (Ref. 26, p. 2) Table 6.1 illustrates some of these proposals for reduced military retirement benefits. Note, however, that none of these proposals became law and some were not even bills.

Table 6.1

Proposed Changes to Military Retirement
1993 - 1997

Title and Date of Proposal	Proposed Change
Kerrey-Brown (Nov 93)	1. Deny COLAs for FY94-99 on retired pay greater than \$30K 2. Zero COLAs until age 62 for all new entrants
Penny-Kasich (Nov 93)	Zero COLAs until age 62, catch up at age 62
Concord Coalition (Jan 94)	Means-test Fed Comp/Benefits * <\$40K = receive all benefit * \$40K-50K = 90% of benefit * \$50K-60K = 80% of benefit * Progressively "means test" until \$120K+ = 15% of benefit
Kerrey-Danforth (1994) (Entitlements Commission)	1. Change CPI 2. Change CSRS/FERS formulas 3. Change MRRA to flat 2%/YOS and drop age 62 catch-up
Gress Proposals (Apr 95)	1. Zero COLAs until age 62 2. Zero COLAs on retired pay over \$14K 3. Cut COLAs 0.5% below CPI
Kerrey-Simpson (May 95) (S. 822)	Means-test COLAs for Soc Sec and Mil/Civ retirees (only lowest 30% get flat rate COLA)
Kerrey-Simpson (May 95) (S. 820)	Change MRRA to flat 2%/YOS and drop age 62 catch-up
Blue Dog Budget Proposal (Oct 95)	Flat dollar COLA for each Fed retirement category
FY96 Budget Reconciliation (Oct 95)	High-1 for military members retiring after 1995 CPI reform (cut by 0.2%/year starting in 1999)
Simpson-Kerrey-Brown-Nunn-Robb (May 96) (Defeated 63-36)	1. Cut retired pay (for future entrants) if retire before age 50 2. Limit COLAs to \$50K of retired pay 3. Set COLAs = CPI - 0.5%
Chafee-Breaux (May 96) (Defeated 53-46)	1. Delay mil/civ retiree COLAs to Apr (through 2003) 2. Delay entitlement to retired pay until age 50 3. COLAs = CPI - 0.5% in 1998/99

Title and Date of Proposal	Proposed Change
	4. COLAs = CPI -0.3% 2000 and beyond
House Budget Resolution (May 96)	Delay mil/civ retiree COLAs until Apr (Civ retirees 1997 and on, mil retirees 1998 and on)
Senate Budget Resolution (May 96)	Delay Federal Civilian COLAs to Apr through 2003 (military likely to follow)
Boskin Report (Dec 96)	Assume CPI overstates inflation by 1.1%/year; cap COLAs to reflect that
Blue Dog Budget Proposal (Feb 97)	COLAs = CPI - 0.8% Flat-dollar amount for COLAs
CBO Options to Reduce the Deficit (Mar 97)	<ol style="list-style-type: none"> 1. Defer COLAs to age 62 for all retirees 2. Limit COLAs to half CPI, with no catch-up 3. Cap COLAs 1% below inflation pre-1986 entrants 4. Cap COLAs on any retired pay above poverty level 5. Require military to contribute to their retirement 6. Drop retirement multiplier from 3.5 at 20 YOS to 2.0 for all new entrants

Source: Adapted from Reference 26

C. FEDERAL EMPLOYEE RETIREMENT SYSTEM

Open seasons are of considerable interest to both CSRS and FERS civil servants. The term "open season" when used in the context of CSRS and FERS has two different meanings. The first refers to the open seasons that allow federal employees who are already covered under FERS to either *start* contributing to or *change* contributions to their Thrift Savings Plan (TSP) account. These open seasons run from November 15 to January 31 and from May 15 to July 31 every fiscal year. The second use of the term open season is with regard to a designated time period that allows federal employees to transfer *from* CSRS *to* FERS.

1. Open Season - FERS Employees

The proportion of FERS-covered employees contributing to TSP and the percent of their salaries contributed has steadily increased. In September of 1987, approximately 44 percent of FERS employees were making voluntary contributions to TSP, with an average contribution of 3.7 percent of their salaries. By September of 1993, 73 percent of FERS employees were making voluntary contributions to TSP, with an average contribution of 5.7 percent of their salaries. (Ref. 18, pp. 6-7) These steady increases indicate that open seasons are being utilized and federal employees are becoming more educated and comfortable with the idea of taking responsibility for their financial well-being in retirement. Table 6.2 summarizes participation and contribution rates from 1987 to 1993.

Table 6.2

FERS Employee TSP Participation and Contribution Rates
1987 - 1993

Year	Employee Participation	Employee Contribution
1987	44%	3.7%
1988	49%	4.9%
1989	52%	5.0%
1990	57%	5.1%
1991	63%	5.3%
1992	68%	5.6%
1993	73%	5.7%

Source: Adapted from Reference 18

2. Open Season - CSRS Employees

In the early fall of 1997, the United States House of Representatives voted to allow 1.1 million federal employees under the older CSRS retirement system to switch to the newer FERS system during a special open season that would run from July 1 through December 31, 1998. The FERS open season provision was contained in the House version of the Fiscal Year 1998 Treasury, Postal and General Government Appropriations Bill. Congress passed the provision which was sponsored by the Senate Appropriations Committee chairman Ted Stevens, R-Alaska.

In October 1997, President Clinton line-item vetoed the measure, calling it "a hastily conceived, undebated provision" that would cost agencies \$850 million in additional retirement costs over five years. (Ref. 29, p. 9) In response to the President's line-item veto, the National Treasury Employee's Union (NTEU) filed suit, claiming the President had exceeded his statutory authority. In early January 1998, NTEU officials and the Justice Department agreed on a settlement that would effectively rescind President Clinton's veto of the provision. (Ref. 30, p. 2)

Many participants of CSRS are eager to take advantage of the open season because of the additional TSP contributions and the recent sustained success of the stock market. Recall that CSRS employees may voluntarily contribute up to 5 percent of their pay to the TSP. Such contributions are not matched by their government agency. FERS employees are automatically enrolled in TSP with a 1 percent contribution by their employing agency. They may contribute an additional 5 percent of their earnings which is matched by their agency. FERS employees may contribute an *additional* 5 percent of their earnings which is *not* matched by their employing agency.

Not surprisingly, investors currently participating in FERS have TSP accounts that average \$32,155, while CSRS employee TSP accounts average \$20,017. (Ref. 32, p. B-2) Federal employees who invested heavily in the C-fund have experienced a significant return on their investment. One dollar invested in the C-fund just over 10 years ago is now worth \$5.71. In 1995 the fund returned 37 percent; in 1996 it returned 23 percent; and in 1997 it returned in excess of 33 percent. For the first quarter of 1998, the fund has returned 14 percent. Over the life of the C-fund, an investor would have realized a compounded annual return of 18.5 percent. (Ref. 31, p. C-2) Over the same period of time, the F-fund would have returned a compounded annual

rate of 8.4 percent, the G-fund, 7.4 percent. With these rates of return, a FERS employee who took full advantage of the TSP would have seen his/her TSP account gain substantially more than a CSRS employee.

The Clinton Administration is concerned with the potential costs associated with an open season that would allow CSRS employees to transfer to FERS. The Administration estimated that a new open season would reduce revenues for the CSRS trust fund by \$854 million over the 1998-2002 period and result in additional costs to federal agencies of \$1.3 billion. A Congressional Budget Office (CBO) study estimated the decline in CSRS revenues over that period to be \$139 million and the increase in agency costs to be \$262 million. (Ref. 33, p. 3)

The difference in projections is primarily due to differing opinions about how many CSRS employees would switch to FERS if given the opportunity. At the time of the initial open season in 1987, the Office of Management and Budget estimated that as many as 40 percent of eligible employees would transfer to FERS. In January of 1988, the Office of Personnel Management confirmed that about 86,000 CSRS employees (about 4 percent) actually transferred. (Ref. 3, p. 11) The Clinton Administration's estimates are based on the assumption that 60,000 workers, or 5 percent of the eligible workforce (CSRS employees), would take advantage of a new opportunity to switch retirement plans. The CBO study estimates that 11,500 CSRS employees (approximately 1 percent of eligible workforce) would take advantage of the opportunity to switch retirement plans. (Ref. 33, p. 3) A survey has not been conducted to ascertain the approximate number of eligible employees that would make the switch. However, with the recent success of the stock market and the positive publicity afforded the TSP C-fund, the Clinton Administration's estimate of 5 percent of eligible employees switching to FERS is

much more likely than the CBO's estimate of 1 percent.

3. The Federal Retirement Coverage Correction Act

On January 1, 1984, the Civil Service Retirement System was closed to new enrollees. Although those employed after this date were supposed to be placed in the Federal Employee Retirement System, some were not. As many as 18,000 employees were put in the wrong system. Employees lost retirement benefits, owed back taxes, and were denied the opportunity to invest in stock funds. About 10,000 of the mistakes have already been corrected. The Federal Retirement Coverage Correction Act (H.R. 3249), a bill introduced in February of 1998 by Representative John Mica of Florida, would correct the mistakes for the remaining 8,000 civil service employees. The Congressional Budget Office estimates that the bill would cost government agencies \$121 million over 5 years. Under the proposed correction bill, agencies would be responsible for incurring all the costs of adjusting affected employees' pension benefits, Social Security benefits and TSP contributions so that employees placed in the wrong retirement system receive the full retirement benefits to which they are entitled. The Office of Personnel Management (OPM) opposes the bill. OPM's less costly version has been introduced in the Senate (S. 1710). (Ref. 34, p. 2)

D. MILITARY RETIREMENT SYSTEM ALTERNATIVES

Because of its significant cost and the perception that it is overly generous, the military retirement system is under constant scrutiny by Congress and the American taxpayer. With the gradual shift from defined benefit plans to defined contribution plans for private sector employees as well as civil service employees, the onus of retirement security is shifting from the corporation and state/federal government to the individual. The military retirement system is one of the last true defined benefit pension plans that has not made the transition to a defined contribution system. This section will examine defined contribution plan options under consideration for the military retirement system.

1. Thrift Savings Plan

The most significant change to private sector as well as civil service employee retirement systems over the past 15 years has been the migration from defined benefit to defined contribution retirement plans that allow tax deferral of current savings until retirement. Some service leaders have proposed allowing active duty military members to invest up to 5 percent of their basic pay in a military version of the TSP for federal civil servants. The concept entails no government matching of the members' contributions. The initiative has three main purposes:

1) Allow post-1986 entrants (REDUX) to offset (with personal tax-deferred savings) the reduced military retirement benefits these members will receive compared to earlier service entrants.

2) Allow service members to participate more fully in stock market growth via the 401(k) style system offered by civilian employers.

3) Assure some retirement benefit for members who choose to serve less than the 20 years normally required to be entitled to military retired pay, in recognition that civilian employers normally vest employees after 5 years or less. (Ref. 26, p. 1)

At first glance, this initiative seems like a win-win situation for service members and taxpayers since there is no matching contribution by the government. However, even without government agencies' matching contributions, there is the issue of how much tax deferrals would cost the Treasury Department in the short term, and whether Congress, still operating under a balanced budget agreement, would agree to pay for it. Recent analyses sent to Congress show that a military TSP would cost the government \$17 million the first year with the cost rising to \$70 million by the fifth year assuming 10 percent of service members participated the first year and 3 percent participation growth for each of the next 4 years. (Ref. 27, p. 14)

This initiative has stirred up much debate between services. The Navy, Marine Corps and Coast Guard like the idea. The Air Force and Army, after much hand-wringing, say they do not. (Ref. 28, p. 90) There is fear that lost tax revenue from a military TSP would be replaced with reductions to the current military retirement system. According to a House committee staff member, "It's very high risk. The enemies of military retirement are ready to pounce. All they need is a little incentive." (Ref. 28, p. 90)

2. Military Federal Employee Retirement System

In a recent research report conducted by RAND's National Defense Research Institute and sponsored by the Office of the Secretary of Defense, a theoretical and empirical model was developed to analyze the effects of converting the current military retirement system to an

alternative system patterned after the Federal Employee Retirement System (FERS). The alternative system consists of three parts. The first is a retirement plan that is very similar to FERS, which they call the Military Federal Employee Retirement System (MFERS). The second part is a 7 percent across-the-board pay increase to compensate members for mandatory contributions to the retirement plan. The third part is a set of retention bonuses targeted to specific groups to address any retention problems. (Ref. 35, p. xi) The remainder of this discussion will focus on MFERS, since it is the retirement portion of the proposed system.

Similar to FERS, MFERS would consist of three parts: Social Security benefits, a defined benefit plan (called the basic plan) that vests employees in an old-age annuity at five years of service, and a defined contribution plan (TSP) that vests employees at three years of service and matches employee contributions up to 5 percent of basic pay.

The study compared the current system (REDUX) and the proposed alternative (MFERS). For MFERS to represent an unambiguous improvement over REDUX, it must reduce costs at the same time it maintains the force structure. Costs are composed of active duty pay plus an accrual charge to fund future retirement liabilities of the current force. A critical element in costing is the real discount rate used to determine the military retirement accrual charge. The real discount rate is an important determinant of the cost of the military retirement system, or the savings from changing it. An increase in the real discount rate reduces the accrual charge for the current force and tends to reduce the savings to be had from implementing policy changes that reduce future retirement outlays. Until very recently, the Department of Defense (DoD) Actuary used a 2 percent real rate in estimating the accrual charge. Beginning in FY 1995, the Actuary raised its real discount rate assumption to 2.75 percent. (Ref. 35, p. xiii)

Since the determination of what the real discount rate should be for public decisions is an inexact science, the RAND study accounted for the uncertainty in real discount rates by evaluating the costs for MFERS assuming various real discount rates. The study found that when 2 percent was used to calculate the accrual costs, MFERS with a pay raise would reduce total manpower costs by about 6 percent and result in annual savings to DoD of about \$2.4 billion based on FY 1997 force levels. At this discount rate, MFERS appears to be a clear improvement over REDUX. The case for MFERS was less compelling when higher real discount rates apply. At 2.75 percent, the savings in total manpower costs decline to 2.2 percent (about \$1 billion for the 1997 force level). When the discount rate is raised to 5 percent, MFERS is estimated to cost 6 percent more than REDUX. (Ref. 35, p. xiv)

Because the results of this study were just recently published, its influence on future policymakers is unclear at this time. The trend, however, remains clear. The responsibility for financial security in retirement continues to shift from corporations and state/federal governments to the individual. The RAND study will be used to inform the debate on the possibility of applying defined contribution elements to the military retirement system.

VII. SUMMARY AND CONCLUSIONS

A. SUMMARY

The objective of the thesis was to examine the military retirement system and the Civil Service Retirement System/Federal Employee Retirement System (CSRS/FERS) from their introductions to present day, detailing the impetus for major changes during their evolution. It began with an examination of the purposes and underlying objectives of the systems and a detailed look at the configurations of the current systems. An in-depth chronological analysis of major changes to the systems was conducted. Finally, current issues and pending legislation affecting the military and civil service retirement systems were examined and the possibility of applying defined contribution elements of the Federal Employee Retirement System to the current military retirement system was explored.

1. Military Retirement System

The purpose of the military retirement system is to provide a retirement plan that is competitive with the private sector, useful as a tool for managing manpower, and is provided at a cost that is considered reasonable by taxpayers to maintain a balanced, effective force.

The current military retirement system is a defined benefit plan. Due to recent modifications (1980 and 1986), there are currently three different retirement system benefit formulas in effect for members of the armed forces. The Final Basic Pay formula applies to those military members entering service before September 08, 1980. The High-Three Year Average formula, commonly referred to as "High-3," applies to those members entering military service from September 08, 1980 through July 31, 1986. The Military Retirement Reform Act of 1986

formula, commonly referred to as "REDUX," applies to those military members entering service after July 31, 1986.

Prior to 1984, the military retirement system was funded on a "pay-as-you-go" basis. Every year as part of the budgetary processes of the federal government, estimates were made of the aggregate retired pay entitlements of personnel on, or expected to be on, the retired lists of the various military departments that year. Congress, through the appropriations process, appropriated money to pay for those entitlements. (Ref. 5, p. 709) This system worked well as far as paying retirees went, but it did not hold policymakers fiscally responsible for the implications of immediate policy decisions affecting the size of the force. To promote better management, Congress established the Department of Defense Military Retirement Fund in 1984. With the establishment of the Fund, Congress directed a switch to an accrual method of funding retirement which required the services to transfer into the Fund each year, the amount necessary to pay for future retirees' benefits. (Ref. 9, p. 1)

2. Federal Employee Retirement Systems

The Civil Service Retirement System (CSRS), and its successor the Federal Employee Retirement System (FERS), are the two largest retirement systems for federal civilian employees. Together, CSRS and FERS covered about 2.8 million federal employees at the beginning of fiscal year 1995. (Ref. 11, p. 2) The basic objective of the CSRS and FERS programs is to attract quality employees by offering a competitive total compensation package (retirement compensation included) that provides for a secure retirement and takes into consideration an inherent responsibility to the nation's taxpayers.

CSRS is a stand-alone, defined benefit contributory pension program that was established in 1920 and predates the Social Security system by 15 years. The program was closed to new entrants after December 31, 1983. The retirement benefit is determined by a formula that is based on an employee's pay and years of service. Employees share in the expense of the annuities to which they become entitled via a mandatory deduction (7 percent of pay) from their salary.

FERS was implemented in 1987, and generally covers those employees who first entered federal service after December 31, 1983 as well as those who transferred from CSRS to FERS. The primary reason for the implementation of FERS was the Social Security Amendments of 1983 which required that all federal employees hired after December 31, 1983 be covered by Social Security. (Ref. 3, p. 6) Cost and the prevalent trend in the private sector of shifting pension programs from defined benefit to defined contribution plans were also significant factors driving the transition from CSRS to FERS for federal employees.

FERS is modeled after the more traditional pension plans of corporate and private sector entities. It is a three-tiered retirement plan comprised of Social Security benefits, a Basic Benefit Plan, and a Thrift Savings Plan. While CSRS is a one part defined benefit plan, FERS is essentially a three part plan, two parts defined benefit (Social Security and the Basic Benefit Plan) and one part defined contribution (Thrift Savings Plan).

Both CSRS and the FERS pension plan are "funded" programs, in that amounts are set aside in a fund from which benefit payments are made. Both plans are funded using a "normal cost" approach. Normal cost is expressed as a percentage of payroll and represents the amount of money that should be set aside during an employees' working years, with investment earnings, to cover future benefit payments. The normal cost of CSRS is 25.14 percent of payroll (employee

contribution=7%, employer contribution=18.14%). The normal cost for the defined benefit portion of FERS is 12.2 percent of payroll (employee contribution=0.8%, employer contribution=11.4%). Under FERS, the employer also contributes to Social Security and TSP. In the aggregate, the normal cost of the FERS defined benefit, TSP, and Social Security is similar to the normal cost of CSRS employee's benefits. (Ref. 20, pp. 25-27)

3. Current Issues

With the increasing emphasis on fiscal efficiency and ensuring that taxpayers are getting the "best value" for their tax dollars, the military retirement system has been subject to considerable scrutiny from legislators and the general public. The 1980 and 1986 changes have resulted in a 25 percent reduction in retirement benefits for military members. In the last four years, there have been 17 proposals that would have cut military retirement benefits, 14 of which would have further reduced the post-1986 (REDUX) system. (Ref. 26, p. 2) This trend of persistent legislative attention implies that the 1980 and 1986 reductions didn't cut deep enough and future reductions to the military retirement system are possible.

Military members have begun to realize the full impact of REDUX on their retirement benefits. Some legislators and many high ranking military officials are concerned that recent retirement cutbacks may be hurting retention. To date, however, almost no data has been compiled within the Defense Department to prove that the reduced retirement plan is cause for reduced retention. (Ref. 24, p. 12)

Open seasons are of considerable interest to FERS and CSRS civil servants. For FERS employees, open seasons allow them to either start contributing to or change contributions to their Thrift Savings Plan account. For CSRS employees, an open season represents a designated

time period that would allow them to transfer from CSRS to FERS.

There is significant data to indicate that FERS employees have made good use of the opportunity provided by open seasons to start *and* increase their TSP contributions. In September of 1987, approximately 44 percent of FERS employees were making voluntary contributions to TSP, with an average contribution of 3.7 percent of their salaries. By September of 1993, 73 percent of FERS employees were making voluntary contributions to TSP, with an average contribution of 5.7 percent of their salaries. (Ref. 18, pp. 6-7) This trend of increasing TSP contributions has come at a time when the U.S. economy has been booming. A recession could significantly alter this trend.

The 1.1 million federal employees under CSRS will soon have the opportunity to transfer to FERS during a special open season that will run from July 1 through December 31, 1998. Many are eager to take advantage of this opportunity because of the recent success of the stock market and its direct impact on FERS employees' TSP accounts. Even though President Clinton recently line-item vetoed the open season provision contained in the Fiscal Year 1998 Treasury, Postal and General Government Appropriations Bill, the National Treasury Employee's Union filed suit and persuaded the Justice Department to agree on a settlement that would effectively rescind President Clinton's veto of the provision. (Ref. 30, p. 2)

4. Alternatives

The military retirement system is one of the last true defined benefit pension plans that has not made the transition to a defined contribution system. Some service leaders have proposed allowing active duty military members to invest up to 5 percent of their basic pay in a military version of the TSP for federal civil servants. (Ref. 26, p. 1) While this concept does not include

government matching of the members' contributions, there is the potential loss to the government of millions of tax revenue dollars. The services are divided over whether to support such a plan because some fear that Congress would replace the tax revenue lost from such a program with reductions to the current military retirement system.

A recent study conducted by RAND's National Defense Research Institute analyzed the effects of converting the current military retirement system to an alternative system patterned after the Federal Employee Retirement System. The alternative system consists of three parts. The first is a retirement plan that is very similar to FERS, which they call the Military Federal Employee Retirement System (MFERS). The second part is a 7 percent across-the-board pay increase to compensate members for mandatory contributions to the retirement plan. The third is a set of retention bonuses targeted to specific groups to address any retention problems. (Ref. 35, p. xi)

Similar to FERS, MFERS has three parts: Social Security benefits, a defined benefit plan that vests employees in an old-age annuity at five years of service, and a defined contribution plan (TSP) that vests employees at three years of service and matches employee contributions up to 5 percent of basic pay. Vesting would provide military members the opportunity to accrue retirement savings that they could take with them if they decided to leave the military after 3 or 5 years. Vesting could also have an adverse effect on retention since military members would no longer be subject to the "all or nothing" element of the current military retirement system.

The study compared the cost of the current retirement system (REDUX) and the proposed alternative (MFERS). The outcome of the comparison was significantly influenced by the real discount rate used to determine the military retirement accrual charge. At a discount rate of 2

percent, MFERS would result in savings of \$2.4 billion. At a discount rate of 5 percent, MFERS would cost more than REDUX. Because the results of this study were just recently published, its influence on future policymakers is unclear at this time.

B. CONCLUSION

The most significant change to private sector as well as civil service employee retirement systems over the past 15 years has been the transition from defined benefit to defined contribution retirement plans. This change has shifted a significant portion of the risk involved in funding retirement from the corporation and state/federal government to the individual, that is, from employers to employees.

While the retirement system for federal employees has transitioned from a strict defined benefit system (CSRS) to a system with a defined contribution element (FERS-TSP), the military retirement system is one of the last pension plans that has not begun the transition to a defined contribution system. Because of its significant cost and the perception that the current military retirement system is overly generous, alternatives for placing a greater responsibility on the military member to contribute to his/her retirement plan are under continuous consideration. The success of the current Federal Employee Retirement System has shown that the application of a defined contribution element to the current military retirement system is very possible in the future, although the potential effects on retention and recruiting are unknown.

C. FURTHER RESEARCH OPPORTUNITIES

This thesis examined the military retirement system and the Civil Service/Federal Employee Retirement System from their introductions to present day, detailing the major changes during their evolution. It also reviewed current issues affecting both systems and potential elements of the current Federal Employee Retirement System that may be applied to the current military retirement system.

The effects of applying defined contribution elements to the military retirement system on recruiting and retention have not been fully analyzed and afford significant opportunity for further research. Additionally, the effects of past changes to the military retirement system have not been fully evaluated and may provide opportunities for future theses.

APPENDIX A

A CHRONOLOGICAL SUMMARY OF SIGNIFICANT CHANGES TO THE MILITARY RETIREMENT SYSTEM

<u>Enactment</u>	<u>Resulting Change</u>
Act of February 28, 1855	Authorized involuntary removal of Navy officers from active list for disability and other reasons.
Act of August 3, 1861	Authorized voluntary retirement of all officers of all services after 40 years of service.
Act of December 21, 1861	Permitted involuntary retirement of Navy officers after 45 years of service or at age 62.
Act of July 17, 1862	Permitted involuntary retirement of Army and Marine Corps officers after 45 years of service or age 62.
Act of July 15, 1870	Authorized voluntary retirement for Army and Marine Corps officers after 30 years of service.
Act of June 30, 1882	Made retirement mandatory at age 64 for officers of all services.
Act of February 14, 1885	Authorized voluntary retirement of Army and Marine Corps <i>enlisted</i> personnel after 30 years of service.
Act of March 3, 1899	Authorized voluntary retirement of Navy <i>enlisted</i> personnel after 30 years of service.
Act of March 2, 1907	Consolidated 30 year voluntary retirement for <i>enlisted</i> personnel of all branches of service.
Act of May 13, 1908	Authorized voluntary retirement of Navy officers after 30 years of service.
Act of August 29, 1916	Established "up or out" promotion system based on age-in-grade. Established standard retired formula of 2.5 percent times years of service up to maximum of 75 percent.
Act of June 22, 1926	Changed Navy officer promotion/involuntary retirement system from age-in-grade to service-in-grade.
Act of July 31, 1935	Authorized voluntary retirement of Army officers after 15 years of service.

<u>Enactment</u>	<u>Resulting Change</u>
Act of June 23, 1938	Model for present promotion/retirement system. Retired if fail to select twice and meet high year tenure. Authorized voluntary retirement for Navy officers after 20 years of service.
Act of February 21, 1946	Lowered statutory retirement age for Navy and Marine Corps officers from age 64 to 62.
Officer Personnel Act of 1947	Established integrated promotion/involuntary retirement system for officers of all services.
Army and Air Force Vitalization and Retirement Equalization Act of 1948	Authorized voluntary retirement of Army and Air Force officers after 20 years of active service. Repealed 15 year voluntary retirement authority from Act of July 31, 1935.
Defense Officer Personnel Management Act of 1980	Provided unified retirement authority for officers of all branches of service.
Department of Defense Authorization Act of 1981	Implement use of "High-3" average for computation of basis for retirement pay.
Department of Defense Authorization Act of 1984	Established Department of Defense Military Retirement Fund. Instituted an accrual accounting system for retired pay.
Military Retirement Reform Act of 1986	Established lower retired pay multipliers for members entering service after July 31, 1986. Reduced annual cost of living adjustment to CPI minus 1 percent.

APPENDIX B

A CHRONOLOGICAL SUMMARY OF SIGNIFICANT CHANGES TO FEDERAL EMPLOYEE RETIREMENT SYSTEMS

<u>Date</u>	<u>Significant Change(s)</u>
1920	<ul style="list-style-type: none"> *CSRS established *<i>Mandatory</i> retirement at age 70, retirement annuity with at least 15 years of service *<i>Disability</i> retirement with at least 15 years of service
1926	<ul style="list-style-type: none"> *Annuity formula established -based on avg salary for final 10 years of service and years of service
1930	<ul style="list-style-type: none"> *Annuity formula changed -basis changed to avg salary for final 5 years of service (high-5) *Optional (voluntary) retirement provisions added -retire at age 68 (2 years less than mandatory) with 30 years of service, no reduction in annuity
1942	<ul style="list-style-type: none"> *Optional retirement provisions liberalized -voluntary retirement at age 60 with 30 years of service -voluntary retirement at age 62 with 15 years of service -voluntary retirement between ages 55-60 with 30 years of service and a proportionally reduced annuity
1956	<ul style="list-style-type: none"> *Optional retirement provision changed -voluntary retirement at age 62 with 5 years of service vice 15 *3-Step benefit formula adopted, using high-5 basis -1.5% of high-5 for each of first 5 years of service -1.75% of high-5 for next 5 years of service -2% of high-5 for years of service greater than 10
1967	<ul style="list-style-type: none"> *Optional retirement provision changed -voluntary retirement as early as age 55 with 30 years of service (no reduction in annuity) -voluntary retirement at age 60 with 20 years of service vice 30
1969	<ul style="list-style-type: none"> *Retirement basis changed -salary basis changed from high-5 to high-3
1987	<ul style="list-style-type: none"> *FERS established

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Naval Postgraduate School
Monterey, CA 93943-5103
5. LCDR Bruce Breth.....1
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